AMENDMENTS TO THE CLAIMS

Claims 1-46: (Canceled)

- 47. (Currently Amended) A peptide nucleic acid with at least one ehemical substituent electron transfer moiety covalently attached to the α -carbon of a monomeric subunit.
- 48. (Currently amended) A peptide nucleic acid according to claim 47 with at least one chemical substituent electron transfer moiety covalently attached to an internal monomeric subunit of the peptide nucleic acid.
- 49. (Currently amended) A peptide nucleic acid with at least one ehemical substituent electron transfer moiety covalently attached to a base of an internal monomeric subunit of the peptide nucleic acid.

50-51. (Canceled)

- 52. (Currently Amended) A composition according to claim [[51]] 47 or 49 wherein said electron transfer moiety is an electrode.
- 53. (Currently Amended) A composition according to claim [[51]] 47 or 49 wherein said electron transfer moiety is a transition metal complex.

Claims 54-59. (Canceled)

- 60. (Currently Amended) A composition according to claim 53 wherein said transition metal complex is a metallocene.
- 61. (Currently Amended) A composition according to claim 54 wherein said metallocene is <u>a</u> ferrocene.